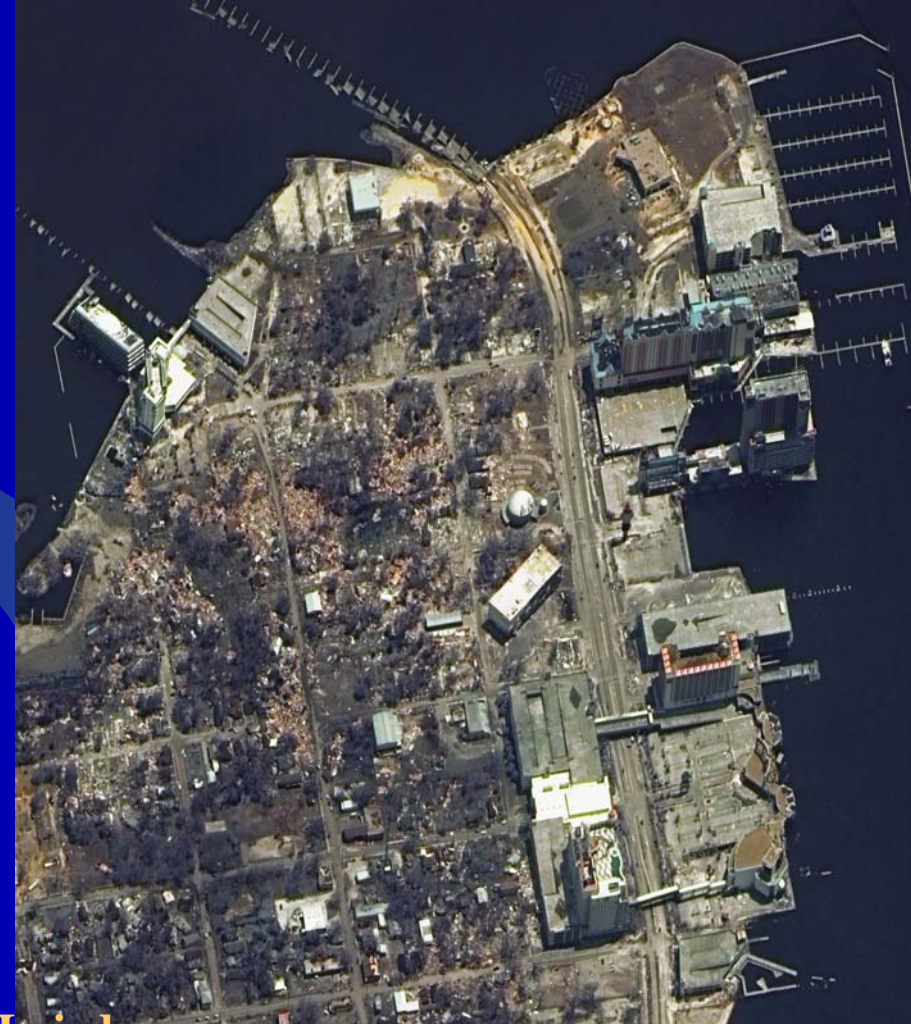


Hurricane Katrina: Mitigation, Response and Recovery



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Introduction

- Provide an overview of events leading up to landfall.
- Provide a listing of critical tasks executed by the Mississippi Emergency Management Agency (MEMA) and the Mississippi Department of Education (MDE).
- Provide information regarding response operations with critical infrastructure destroyed.
- Provide information regarding recovery efforts to restore education operations.
- Cite lessons learned to date.

Hurricane Katrina Facts

- The most destructive hurricane in recent history based on material damage, deaths, and population dislocation.
- Category 5 (Catastrophic).
- Winds in excess of 184 MPH.
- Storm surge of 33 Feet.
- Most destruction focused from New Orleans to Biloxi.
- All 6 coastal counties had received crisis response training and plan development 180 days prior to the hurricane.

Friday, August 26, 2005 (2:00 PM)

- **MEMA calls meeting of all key state agencies to discuss planning for the storm response.**
- **State Agencies are warned to stand by for activation of the State Emergency Operations Center (EOC), no later than Sunday, September 28, 2005 at 7:00 AM.**



MDE Actions:

- Put the Crisis Response Team on standby to man the EOC.
- Communicated the following information to school districts:
 - Current weather forecast information and probable impact on education operations.
 - Advised districts to implement the hurricane/flooding/ tornado aspect of district and school crisis response plans.
 - Provided guidance regarding school cancellations.
 - Reviewed district assets for possible MEMA taskings.
 - Initiated liaison with MS Dept. of Human Services, Red Cross, and Salvation Army regarding shelter taskings.

Saturday, August 27 (7:00 AM)

- Katrina shifts to the north with projected landfall in the vicinity of New Orleans.
- Wind speed 145 MPH.
- MEMA EOC activated at this time and all agencies report.
- Warning tasking for school buses and drivers for evacuation issued by MEMA.
- Warning tasking for school shelters issued by MEMA.





- **Contra-flow of I-59 and I-55 for New Orleans evacuation begins at 3:00 PM per request of LEMA and New Orleans.**
- **Voluntary evacuation of all coastal counties begins.**
- **Mandatory evacuation of all costal counties begins at 4:00 PM.**
- **Governor declares state of emergency.**
- **Governor requests presidential declaration of emergency (Granted by President Bush immediately).**

MDE Actions



- Schools begin to open as America Red Cross or state shelters.
- Bus assets identified and on standby.
- School closings identified.
- Schools notified telephonically of updated weather forecasts and warned “this is not a normal hurricane.”
- MDE Crisis Response Team on permanent MEMA assignment.

Sunday, August 28, 2005 (6:00 PM)

- **Landfall predicted at New Orleans.**
- **Winds projected at 160 MPH.**
- **Storm surge projected at 22 feet.**
- **10-15 inches of rain projected.**
- **100+ mph winds 150 miles in front of and up to 250 miles either side of the storm.**
- **All six coastal counties under mandatory evacuation.**
- **Contra-flow terminated at 6:00 PM due to lack of traffic.**

- **23 school based shelters opened and operated by either the ARC or Department of Human Services.**
- **Total school based shelter capacity 7500+ by 4:00 PM.**
- **Municipal and county School Resource Officers (SROs) return to agencies of origin. Some district SROs drafted by local agencies.**
- **State EOC settles down to wait with quivering anticipation!**



MDE Actions:

- Crisis Response Team reviews response and recovery protocols.
- Insufficient evacuees for school bus deployment. Buses remain standing by.
- Final e-mail communication with school districts advising contact numbers and requesting damage assessments ASAP.



Monday, August 29, 2005(8:00 AM)

LANDFALL!



- **7:17 AM: rescue calls start.**
- **9:19 AM: Jackson County EOC floods.**
- **10:51 AM: Hancock EOC destroyed with 35 coordinators trapped.**
- **Massive flooding along all coastal counties.**
- **Total of 93 shelters statewide with population of 12,697.**

Initial Reports/Reactions

Monday, August 29, 2005 (8:00 pm)

- All communications lost with districts south of Jackson due to tower damage.
- Partial communications restored via School Resource Officers' radios.
- Total devastation throughout southern and eastern central Mississippi.
- Total destruction of all buildings and infrastructure between the beach and railroad tracks (1/4 mile inland).

MDE Actions

- 42 school shelters open.
- School shelter population is 4,631.

Lessons Learned (State Level)

- **The state education agency (SEA) should be a component of the state emergency management agency. The normal emergency services function for education is shelter and transportation.**
- **The SEA should have a representative at the state emergency operations center (5 trained emergency operations specialists for 24 hour manning).**
- **The SEA should have survivable contact with all superintendents (Satellite phones).**
- **The SEA should have home, cell, pager, business, and alternate phone numbers for all school district key staff, as well as e-mail addresses.**
- **School Lunch Director should prepare to release school and USDA stocks pursuant to MEMA tasking to shelters.**
- **The SEA and LEA can task as well as receive taskings.**

Lessons Learned (Local Level)

- The local education agency (LEA) should be represented at the local emergency operations center (EOC).
- Mitigation should begin as soon as possible and should include:
 - a. Contingency plans for key employee contact post incident.
 - b. Protection of critical school infrastructure such as:
 - 1. PCs, routers, electronics (Move to vault)
 - 2. Vehicles
 - 3. POL supplies
- Relocation locations of key staff (Where did they go?).
- Four level chain of command for district and school.
- Consider the school board declaring a state of emergency before evacuation.
- Formally activate the crisis response plan for subsequent FEMA claims.

Lessons Learned (Local Level)

- Schools should only open as shelters pursuant to a local or state EOC tasking or thru the American Red Cross.
- Only operate as a shelter with security present. Do not anticipate gratitude from refugees.
- Park evacuee vehicles away from the shelter area and restrict refugee access.
- Schools should anticipate losing SROs.
- You can use school lunch stocks to feed refugees in a shelter with a state authorization. In the event of power loss, all frozen foods can be released to local EOC control.
- Use the local EOC for needs in accordance with state EM law.



Response: Rescue Operations

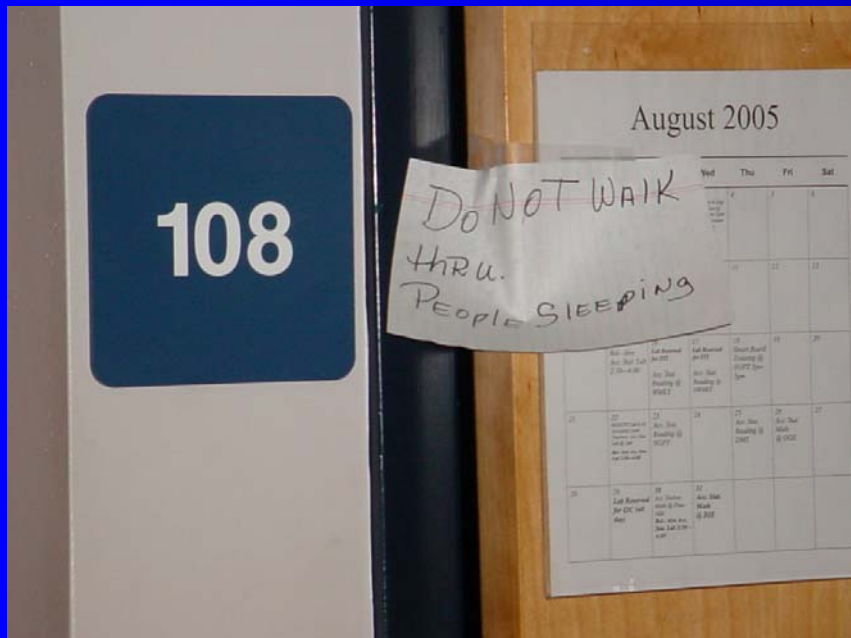
Tuesday, August 30th thru Sunday, September 4th, 2005











MDE Actions

- **Attempted damage assessment. Efforts hampered by lack of communication. Utilized SRO radio contact thru law enforcement.**
- **Expanded Crisis Response Team to deal with recovery issues.**
- **Prepared Damage Assessment and Recovery Teams (DART) for deployment.**
- **Since education was not actively involved in response/rescue operations, we examined projected issues for recovery.**

MDE Issues to be Addressed

- **Issues the SEA needed to address:**

- **Damage to infrastructure:**

- **Buildings**

- **Damage assessment, construction costs, structural safety**
 - **Access, flood damage**

- **Technology**

- **Router systems and phone systems for internet access**
 - **Damaged or flooded computer systems for payroll, time and attendance, and supplies and inventory**

- **Cafeteria**

- **State utilization of food service facilities**
 - **Food distribution and USDA issues**
 - **Continued feeding of the dislocated citizens**

MDE Issues to be Addressed

- **Transportation**
 - **Bus damage, taskings, POL spills and issues**
- **Materials**
- **FEMA public assistance issues**
- **Dislocated staff**
- **Dislocated students**
- **Payroll issues**
- **Out of district enrollment issues**
- **Student immunization and vaccination issues**
- **Student records**

Why is this Important?

- **Research by NOVA indicates that school has an emotionally stabilizing effect on juvenile refugees. Having a regular school program, even if it is not ideal gives refugee students at least one aspect of their lives in a shelter situation that is stable and predictable, which can assist in developing emotional stability.**
- **Resuming even minimal education operations provides parents with a secure location for children while they deal with activities of daily survival.**
- **Students with indications of Post Traumatic Stress Disorder can be more easily identified and helped when in a central group setting.**
- **According to a United Nations study, shelter facilities that have a school continuation program experience less crime than those that do not.**

Disaster Assessment and Recovery Team (DART)

- **DART is composed of a multidisciplinary team that will deploy upon request of the district superintendent in accordance with the provisions of Section 37-3-93, Mississippi Code of 1972, Annotated to furnish recovery assistance to help the district resume minimal education operations.**
- **The DART will deploy only on order of the Director of Healthy Schools.**
- **The DART will only deploy in state vehicles.**
- **The DART will NOT deploy to unsecured areas.**
- **Meet with the superintendent immediately upon arrival unless otherwise directed.**
- **Assure the superintendent that MDE will not assume control of any operations and can only furnish technical assistance, advice, and attempt to locate state assets.**
- **Deploy team members with their district counterpart.**

Technology



- **Restore cell and phone communications.**
- **Restore power.**
- **Reactivate routers and internet.**

Cafeteria

- Feed refugees.
- Get reimbursement for expended food supplies.
- Allocate food.
- Feed students in restored schools.
- Obtain equipment.
- Maintain records.



Transportation



- **Damage Assessment.**
- **POL Issues.**
- **Environmental Issues.**
- **Fuel Stocks.**
- **Distribution.**
- **MEMA Mission Taskings.**

Materials

- Establish “wish list.”
- Establish “donor” list.
- Pair up donors and recipients.
- Coordinate and allocate resources with MEMA.
- Cleaning supplies.
- Logistics.
- Storage.



Dislocated Staff



- **Locate staff in shelters or with friends.**
- **Notify schools of staff locations.**
- **Disseminate payroll information.**
- **Disseminate district information.**
- **Keep staff informed.**

Utilization of School Property

- Schools may be used by law enforcement, national guard, or FEMA responders.





Dislocated Students

- Determine locations and numbers in shelter.
- Design an out of district enrollment system.
- Immunization data.
- Student record exchange.
- Liaison with other state shelters.









Recovery: Counting the Cost

- **Total destruction of 16 of 87 schools in the coastal counties.**
- **Severe damage (<75%) of 24 of 87 schools in the coastal counties.**
- **Moderate damage of 64 schools.**
- **Minor damage to 124 schools.**
- **245 buses destroyed.**
- **75% of the entire state of Mississippi loses electrical power.**
- **Non emergency MDE staff cannot get to work due to traffic problems.**
- **Existing fuel supplies exhausted. MEMA seizes fuel stocks to include school district stocks.**
- **Local law enforcement seizes fuel trucks.**
- **565 people missing/ 151 Children missing/220+ deaths.**

Damage Assessment

- Internet
- Telephonic
- DART
- MEMA



Lost Days

Out of 152 School Districts:

- **13 districts missed no class days.**
- **65 districts missed 1-5 days.**
- **47 districts lost 5-10 days.**
- **31 districts lost 15-30 days.**
- **2 districts lost 45 days.**

Considerations for USDOE

- **Consider formulation of a departmental crisis response team. The mere appearance of USDOE staff at the state and local level is overwhelmingly comforting to LEAs and SEAs.**
- **The deferment of actual crisis response operations to FEMA is adequate, effective and efficient.**
- **Consider funding for SEA crisis response team and plan development.**
- **The Crisis Response Planning Grant works:**
 - **All schools in the coastal counties received crisis response training and plan development within six weeks of Hurricane Katrina.**

Lessons Learned (SEA)

- You can't do recovery until response is complete. Too much competition for resources.
- Prepare to receive more offers of assistance than you can handle.
- Work thru the chain of command at the state and national level. Going outside merely slows down the recovery process.
- Screen damage reports. The situation is never as bad as it is portrayed.
- Be prepared for everyone to find fault with what you are doing to respond.
- One of the jobs of the SEA is to act as an advocate for the LEA.
- Establish an emergency operations center in the SEA in addition to one at the state to handle critical issues statewide.
- Begin the legislative process early.

Lessons Learned (SEA)

- Be prepared to address student transfer issues.
- Be prepared to address lost school days.
- Be prepared to address:
 - Loss of ad valorem tax base.
 - Loss of sales tax revenues.
 - 20-30% decrease in ADA for affected districts.
 - Up to a 10% increase in non affected district enrollment.

Lessons Learned (LEAs)

- Take crisis response planning seriously. It probably won't happen to you; but it is a statistical certainty it will happen to somebody somewhere.
- Have a good crisis response plan and update it annually.
- Begin the FEMA claims process when you declare an emergency. Mitigation is reimbursable.
- Consider hiring an insurance consultant to represent the school district.
- Document, Document, Document!
- Don't contract immediately, check into contractor references. Contractors will descend like locusts.
- Don't be overwhelmed with the damage you see. The situation is NEVER as bad as it appears to be initially.

Lessons Learned (LEAs)

- **FEMA only pays after insurance claims are filed.**
- **Prepare to receive more offers of assistance than you can handle.**
- **Work thru the chain of command at the local, county, and state level.**
- **Screen damage reports. The situation is never as bad as it is portrayed.**
- **Use all staff for cleanup and recovery. The salary is reimbursable and staff can be kept on the payroll.**
- **Take care of your staff. Will they get paid for lost time and how?**
- **Be prepared to take in additional out of district students.**
- **Loss of revenue issues.**

Mission: Restore minimal education operations as soon as possible.

The last Mississippi school resumed operation on November 1, 2005.

ACCOMPLISHED!

The Mississippi Department of Education would like to express its appreciation for the following entities that provided data for this presentation:

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